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**Health Care Service Utilization of Documented and Undocumented U.S. Farm Workers**

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# Health Care Service Utilization of Documented and Undocumented U.S. Farm Workers

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## Introduction

- Efforts aimed at sustaining a healthy labor force would not only promote individual health welfare, but also ensure a productive labor force that could adequately supply the needs of the economy.
- An increasing number of domestic residents in the U.S. opt to exit agriculture. Majority of those who are still working on U.S. farms are immigrant workers (Martin 2009).
- In order to nurture an overall productive farm labor force in the U.S., the health care utilization of non-citizen farm workers need to be given the same attention and consideration

## Objective

To investigate the determinants of health care utilization of U.S. farm workers and the determinants for farmer workers' choices of health care provider and the payment method for health care services

## Data

- Data source: 2000-2009 National Agricultural Workers Survey (NAWS)
- This survey provides comprehensive micro-level individual information on farm workers in the U.S.
- Four outcome variables of interest:
  - U.S. healthcare use
  - Foreign healthcare use
  - Healthcare provider
  - Methods of payment



## Econometric strategies

This article uses the probit model to investigate the farm workers' probability of accessing health care services.

$$\text{Healthcare}_{it\tau} = \alpha_0 + \beta X'_{it\tau} + \gamma_t + \rho_\tau + \varepsilon_{it\tau}$$

Healthcare<sub>itτ</sub> equals one if a farm worker *i* in year *t* and region *τ* has utilized health care (in U.S. or in foreign countries) within last two years, and equals zero if otherwise. *X*<sub>itτ</sub> includes other demographic variables controlled in the probit model. *γ*<sub>*t*</sub> and *ρ*<sub>*τ*</sub> are time and region fixed effects, and *ε*<sub>itτ</sub> is the error term.

## Results

Table 1. Determinants for Domestic and Foreign Health Care Utilization of Farm Workers in U.S.

	U.S. healthcare			Foreign healthcare		
	(1)	(2)	(3)	(4)	(5)	(6)
Age	-0.001 (0.001)	-0.001 (0.001)	0.002* (0.001)	0.002*** (0.000)	0.002*** (0.000)	0.002*** (0.000)
Years in US	0.000 (0.001)	0.000 (0.001)	0.001 (0.001)	-0.001** (0.001)	-0.001** (0.001)	-0.001** (0.001)
Green card	-0.019 (0.029)	-0.011 (0.030)	-0.038 (0.029)	0.057*** (0.019)	0.053** (0.021)	0.047** (0.021)
Undocumented	-0.125*** (0.033)	-0.092*** (0.034)	-0.127*** (0.032)	-0.027 (0.018)	-0.040* (0.019)	-0.046** (0.019)
Single	-0.050*** (0.016)	-0.047*** (0.016)	-0.044*** (0.016)	0.007 (0.007)	0.009 (0.008)	0.009 (0.008)
Education	0.001 (0.003)	0.002 (0.003)	0.002 (0.002)	0.003*** (0.001)	0.004*** (0.001)	0.004*** (0.001)
Speaking	0.030** (0.015)	0.026* (0.015)	0.030** (0.015)	-0.022*** (0.007)	-0.023*** (0.008)	-0.022*** (0.008)
Reading	0.061*** (0.015)	0.066*** (0.015)	0.060*** (0.015)	-0.005 (0.008)	-0.008 (0.008)	-0.009 (0.008)
Total income	0.026*** (0.003)	0.030*** (0.003)	0.029*** (0.003)	-0.012*** (0.001)	-0.013*** (0.001)	-0.013*** (0.001)
Female	0.366*** (0.020)	0.371*** (0.020)	0.386*** (0.020)	-0.068*** (0.009)	-0.072*** (0.009)	-0.069*** (0.009)
Need variables	YES	YES	NO	YES	YES	NO
Year fixed effects	YES	NO	NO	YES	NO	NO
Regional fixed effects	YES	NO	NO	YES	NO	NO

Note: All model specifications include year fixed effects and regional fixed effects. Need variables include dummy indicators for if a farm worker has asthma, diabetes, high blood pressure, tuberculosis, heart attack, urinary disease, and other diseases. Other covariates included in regression but not reported in the table are the number of farm work days and race. Models are weighted by the sample weight provided by NAWS that can help obtain unbiased statistics for person-level analyses. Huber-White robust standard errors are reported in the parenthesis.

\*\*\* Statistically significant at the 0.01 level, \*\* Statistically significant at the 0.05 level, \* Statistically significant at the 0.10 level

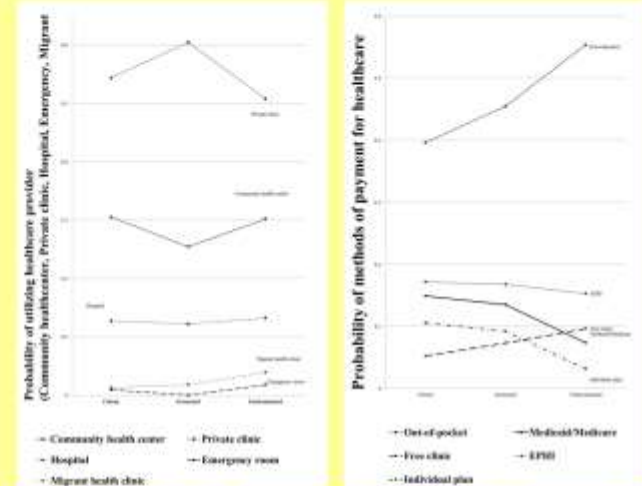


Table 2. Probability of healthcare provider choices and healthcare payment methods used by farm workers

## Conclusions

- Immigrant farmworkers, regardless of immigration status, actually do not have a statistically higher probability of using health care compared to citizens.
- Private clinics and community health centers were identified as the two most popular health service providers for all farm workers.
- For workers with constrained access to health insurance and public welfare benefit programs, personal (out-of-pocket) funds are used to pay for health care services obtained.
- The financial strain of allocating some portion of the limited household disposable income of immigrant farm workers, especially the undocumented category, would compel the workers to either forcibly limit or postpone their health care service demands.